RESPONSE AND REQUEST FOR RECONSIDERATION

Claims 1, 3, 6, 8 and 12-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Malfer (US 5,725,612) in view of Aiello (US 5,006,130). Applicants respectfully traverse.

Malfer teaches a fuel composition, preferably gasoline comprising a Mannich reaction product and a polyoxyalkylene carrier, wherein the Mannich is formed from the reaction of a hydrocarbyl substituted hydroxyaromatic compound having a polyolefin and a C1-4 alkyl substituent, an aldehyde and a polyamine. In contrast, Applicants' invention teaches a fuel composition comprising a fuel, polyisobutylene amine and a Mannich reaction product, wherein the Mannich is formed from the reaction of alkyl-substituent hydroxyaromatic, which comprises phenol or ortho-cresol or mixtures thereof, an aldehyde and a polyamine. Malfer does not disclose or teach the use of the second detergent, polyisobutylene amine.

Aiello teaches a fuel composition comprising an aliphatic alkylene amine and polyoxy ether carrier. As previously stated, Applicants' invention teaches a fuel composition comprising a fuel, polyisobutylene amine and a Mannich, without the presence of a polyether.

The Examiner asserts that it would be obvious to one of ordinary skill in the art to have combined the Mannich detergent in Malfer with the polyamine detergent in Aiello. Since both Malfer and Aiello require the present of a polyether, combining Malfer with Aiello it is apparent that this combination would yield a formulation containing a mixture of Mannich/ polyisobutylene amine/polyether. In contrast, in a preferred embodiment of the Applicants' claimed invention the polyether is not present or required to make the present invention work. Furthermore, there is no motivation, suggestion or teaching in either the Malfer or Aiello references that the formulations contained therein could be made at all without the presence of the polyether.

Furthermore, the Examiner's assertion of the prima facia case of obvious is overcome by the data found in Tables 1 and 2 of the Application. The data shows that the Applicants' combination of a Mannich detergent and polyisobutylene amine (see Table 2, example 8) generates less intake valve deposits when compared to Aiello's combination polyisobutylene amine and polyether (see Table 2, example 6). Furthermore, the combination of a Mannich detergent and a polyether (see Table 2, example 7) yields more intake valve deposit than the Applicants' invention (see Table 2, example 8). The Examiner's attention is also directed to the Declaration submitted herewith from Mitchell M. Jackson, dated June 27, 2005. The Example 2 found in Jackson's

Declaration shows that DMAPA (dimethylaminopropylamine) Mannich, which fall within the type of detergent in Malfer reference, in combination with a polyether does not reduce intake valve deposit as compared to Example 8 in Table 2 of the application. Furthermore, comparing Example 2 with Example 1 in the Jackson Declaration, Example 2 causes worse intake valve deposit formation as compared to Example 1, which is the baseline. (Shown below is the table from the Jackson Declaration)

	Examples	Intake Valve Deposit, mg
Ex. 1	Base Fuel + (no additive)	162
Ex. 2	Base Fuel + 235 ppm of additive package	171

The data shows that combining the Mannich with the polyisobutylene amine without the presence of the polyether or polyolefin generates less intake valve deposits and thus produces unexpected results. Thus, it is unobvious to combine the Mannich detergent and the polyisobutylene amine of the present invention.

Applicants respectfully submit that the claimed invention is not suggested by or obvious from the cited art. Applicants respectfully request that the Examiner withdraw the rejection.

Claims 1, 3, 6, 8 and 12-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harle (US 4,166,726) in view of Moreton (US 5,876,468). Applicants respectfully traverse.

Harle teaches the use of a Mannich detergent and polyalkylene amine in a diesel fuel for solving the problem of thermal degradation and oxidation of the diesel fuel (see column 1 lines 54-62), which leads to fuel filter plugging (see column 1, lines 19-25). Applicants' present invention teaches the use of a specific Mannich detergent in combination with polyisobutylene amine to reduce deposit formation on intake valves. The Harle reference does not teach, suggest or disclose the use of Mannich detergent and polyalkylene amine to reduce deposit formation on intake valves.

Morton teaches the use of a Mannich detergent in a fuel composition wherein the Mannich is a reaction product of polyisobutene-substituted phenol, an aldehyde and ethylene to help inhibit the formation of and facilitating the removal of engine deposits.

Since Harle is not concerned with providing a fuel composition to reduce deposit formation on intake valves, there would have been no motivation to combine the

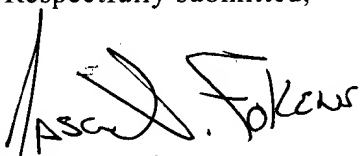
teachings of Harle with the teachings of Moreton. Even if the teachings were combined, the resulting combination would not have been sufficient to render Applicants' claimed invention obvious because one skilled in the art would not anticipate or expect that the thermal stability additive found in Harle, which functions as a solubilizer for polar molecules resulting from the oxidation of the diesel fuel, to be a detergent capable of cleaning or keeping deposits from an intake valve of a gasoline powered engine. Thus, the defects of the Harle reference are not cured by the addition of the information provided in the Moreton reference. Applicants respectfully submit that the claimed invention is not suggested by or obvious from the cited art and respectfully request that the Examiner withdraw the rejection.

Conclusion.

The foregoing remarks are believed to be a full and complete response to the outstanding office action. Therefore an early and favorable reconsideration is respectfully requested. If the Examiner believes that only minor issues remain to be resolved, a telephone call to the Undersigned is suggested.

Any required fees or any deficiency or overpayment in fees should be charged or credited to deposit account 12-2275 (The Lubrizol Corporation).

Respectfully submitted,



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